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PATENT
5500-48700/TT3313

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application No.: 09/366,441
Filed: August 3, 1999
Inventors:
Campbell, et al.

Title: System and Method for Monitoring and/or Controlling Attributes of Multiple Chemical Mixtures with a Single Sensor

§

Examiner: Siefke, Samuel P.
Group/Art Unit: 1743
Atty. Dkt. No: 5500-48700

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Robert C. Kowert
Printed Name

Signature

September 21, 2005
Date

SUPPLEMENTAL REPLY BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir/Madam:

In response to the Supplemental Examiner's Answer mailed July 21, 2005, Appellants present this Supplemental Reply Brief. Appellants respectfully request that this Supplement Reply Brief be entered and considered by the Board of Patent Appeals and Interferences pursuant to 37 C.F.R. § 41.41 and § 41.43(b).

REPLY TO SUPPLEMENTAL EXAMINER'S ANSWER

Grouping of Claims:

As in the Examiner's Answer (item 7) the Examiner again incorrectly states (Supplemental Examiner's Answer, item 7) that claims 1-6 stand or fall together, "because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof," citing 37 CFR 1.192(c)(7). However, as noted in Appellants Reply Brief dated April 21, 2005, effective September 13, 2004, 37 CFR § 1.192 was deleted. Appellants note that there is no longer any requirement to include a specific statement regarding the grouping of claims. As per 37 CFR § 41.37(c)(1)(vii), "[a]ny claim argued separately should be placed under a subheading identifying the claims by number." Appellants Appeal Brief, filed September 16, 2004, (section VII, Argument) argues claim 6 under a separate subheading under both the first and second grounds of rejection. **Thus, the Examiner's statement that claims 1-6 stand or fall together is incorrect.**

First Ground of Rejection:

Claims 1-5:

Appellants note that the Examiner has failed to provide any supplemental arguments in rebuttal of Applicants' arguments regarding claims 1-5 presented in the Reply Brief filed April 25, 2005 in regard to the first ground of rejection.

Claim 6:

Appellants have argued that Tawarayama does not teach a return distribution system, wherein the return distribution system is configured to transport purge fluids from the sensor to a drain, and to selectively transport the first sample flow from the sensor to the first chemical vessel or to the drain, and to selectively transport the second sample flow from the sensor to the second chemical vessel or to the drain, as recited in

claim 6. The Examiner argues, (Supplemental Examiner's Answer, page 7) that Tawarayama anticipates claim 6 because Tawarayama's system includes a drain after detection unit 7. However, Tawarayama does not disclose a *return distribution system* configured to *selectively* transport a first sample flow from the sensor to the first chemical vessel or to the drain. Firstly, Tawarayama merely describes "cleaning the insides of the flow passage 5 and the flow cell of detection unit 7" (Tawarayama, col. 6, lines 3-6). Nowhere does Tawarayama describe a return distribution system, as recited in claim 6. The drain of Tawarayama cannot be considered a *return distribution system* configured to *selectively* transport a sample flow anywhere. Tawarayama does not describe selectively transporting fluids to the drain in his system.

The Examiner contends that merely because Tawarayama's system includes a drain, Tawarayama anticipates the specific limitation regarding the return distribution system recited in Appellants' claim 6. However, nothing in Tawarayama's system can be considered to *selectively* transport fluids to the drain. Instead, the drain is the only place to which fluids can be transported from detection unit 7. Furthermore, the Examiner considers detection unit 7 equivalent to the sensor of claim 6. Claim 6 clearly recites a return distribution system configured to transport purge fluids from the sensor to the drain and to *selectively* transport a sample flow from the sensor *to a chemical vessel or to the drain*. There is nothing in Tawarayama's system between detection unit 7 and the drain. Thus, Tawarayama does not disclose a return distribution system configured to selectively transport a sample flow from detection unit 7, which the Examiner considers the sensor of claim 6, to a chemical vessel or to the drain.

Similarly, Tawarayama does not disclose a return distribution system configured to selectively transport the second sample flow from the sensor to the second chemical vessel or to the drain, as recited in claim 6.

As anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim (*Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir.

1984)) and since, as shown above, Tawarayama clearly fails to disclose the return distribution system recited in claim 6, Tawarayama cannot anticipate claim 6.

Second Ground of Rejection:

Claims 1-5:

Appellants have argued that EP 544 does not teach a sensor configured to selectively receive a first sample flow of a first chemical mixture from a first chemical vessel and to selectively receive a second sample flow of a second chemical mixture from a second chemical vessel, as recited in claim 1. The Examiner responds (Examiner's Answer, item 11, paragraph 3) that he is "relying upon the metering flow of the sample [in EP 544] for the sensor limitation." However, as noted in Appellants' Appeal Brief, the metering performed by the sampling valve of EP 544 does not teach a *sensor* configured to measure a first sample attribute of a first sample flow and a second sample attribute of a second sample flow. The terms "metering" and "measuring quantity" are used in EP 544 to mean obtaining a specific amount of fluid, not as a sensor configured to measure attributes of chemical mixtures. The device in EP 544 does not include any sensors that measures any attribute of any chemical mixture. Instead, it simply transfers a fixed amount of fluid from one passage to another. Referring to Fig. 1 of EP 544, the metering in EP 544 means nothing more than flowing a sample in direction A from pipette 16 to fill up passage P1. The movable element 12 is then moved up to transfer the "metered" sample to the other passage. This sampling valve action has nothing to do with a sensor configured to measure attributes of chemical mixtures.

Additionally, Appellants have argued in the Reply Brief (regarding claim 2) that the Examiner's reliance upon the metering flow of the sample in EP 544 for the sensor limitation fails to teach a concentration sensor configured to measure concentration, as recited in Appellants' claim 2. Specifically, Appellants argue that the sampling valve of EP 544 cannot possibly be interpreted as a concentration sensor configured to measure concentration of a chemical within a sample flow. In his Supplemental Examiner's Answer (page 8) the Examiner responds by citing EP 544, page 4, lines 40-45 and

referring to the discussion in EP 544 regarding Figs. 3-6 in which five different metering passages (P1 –P5) deliver samples for measuring different characteristics of blood. The Examiner "refers to a detector (sensor) for analyzing a sample for mean red corpuscular hemoglobin concentration". The Examiner also contends that the apparatus of EP 544 includes "sensors for measuring the concentrations of the eight characteristics" after the metering passages in EP 544. The Examiner reliance on the mention of measuring eight characteristics of a complete blood count is completely inconsistent with the Examiner's statement in the Examiner's Answer, item 11, paragraph 3 that he is "relying upon the metering flow of the sample [in EP 544] for the sensor limitation." Moreover, the apparatus in EP 544 does not actually include any sensors. The metering device of EP 544 simply dispenses sample into chambers B1 – B5. Presumably, CBC (complete blood count) tests can then be run on one or more of the sample from chambers B1- B5. However, EP 544 provides absolutely no detail on what type of device is used to perform the CBC tests. Nor does EP 544 provide any description of where such a device is located. The teachings of EP 544 pertain only to how samples are metered out into chambers B1 – B5. For instance, EP 544 states, "the setting means 30 selects the number and particular samples to be discharged into the containers B" (EP 544, page 3, liens 57-58). Additionally, the Abstract of EP 544 clearly describes the containers (Bi) "for receiving diluent liquid and samples of liquid specimen from the sampling valve". Thus, the system of EP 544 does not include any actual sensors. Instead, EP 544 allows various samples to be obtained for analysis. The portions of EP 544 that the Examiner refers to in regard to measuring different characteristics of blood are simply statements of use in regard to the purpose for obtaining the samples. Since EP 544 does not include any description of how any type of blood characteristic measurement device would connected to the metering apparatus (sampling valve) of EP 544, the Examiner is clearly applying hindsight in an attempt to reconstruct Applicants' claimed invention.

Additionally, the sampling valve of EP 544 is not configured to measure sample attributes of two respective sample flows. In his rejection, the Examiner refers to dispensing means C1 to C5 as fluid holding vessels. However, EP 544 fails to disclose anything regarding measuring an attribute of a flow of the dilution liquid from C1 to C5.

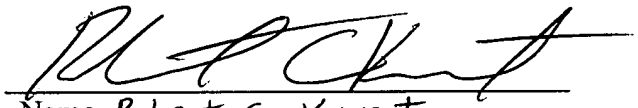
Instead, EP 544 states that the dilution liquid is used to discharge the samples (*see, e.g.* EP 544, page 2, lines 30-32 and page 3, lines 15-16). Nowhere does EP 544 mention anything regarding measuring the flow, or any other attribute, of the dilution liquid. Thus, the Examiner's reliance on dispensing means C1 to C5 is misplaced. EP 544 fails to disclose any sensor configured to measure a first sample attribute of a first sample flow and a second sample attribute of a second sample flow, as recited in claim 1. Also, pipette 16, not dispensing means C1 to C5, is the sample source for the metering apparatus of EP 544. The metering function of EP 544 operates only on a sample from pipette 16, and not on the fluid from C1 to C5. Thus, the apparatus of EP 544 clearly cannot be considered to selectively receive a first sample flow of a first chemical mixture from a first chemical vessel and to selectively receive a second sample flow of a second chemical mixture from a second chemical vessel.

Furthermore, as noted above, the sampling valve of EP 544 receives samples only from pipette 16. In other words, there is only one sample supply in EP 544. Thus, the apparatus of EP 544 clearly cannot be considered to selectively receive a first sample flow of a first chemical mixture from a first chemical vessel and to selectively receive a second sample flow of a second chemical mixture from a second chemical vessel, as is recited in Appellants' claim 1. Appellants note that the Examiner has failed to provide any rebuttal to this argument.

CONCLUSION

For the foregoing reasons submitted in the Appeal Brief, Reply Brief and this Supplemental Reply Brief, it is submitted that the Examiner's rejections of claims 1 – 6 were erroneous. Reversal of the Examiner's decision is respectfully requested.

Respectfully submitted,



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